Leveraging AI in IT Operations

Contents

Executive Summary

The delivery and management of **IT operations are changing** as a result of artificial intelligence (AI).

AI now assists IT teams in automating repetitive tasks, anticipating possible problems before they arise, and maintaining system functionality as a result of organisations' growing complexity, dispersed infrastructure, and growing service demands.

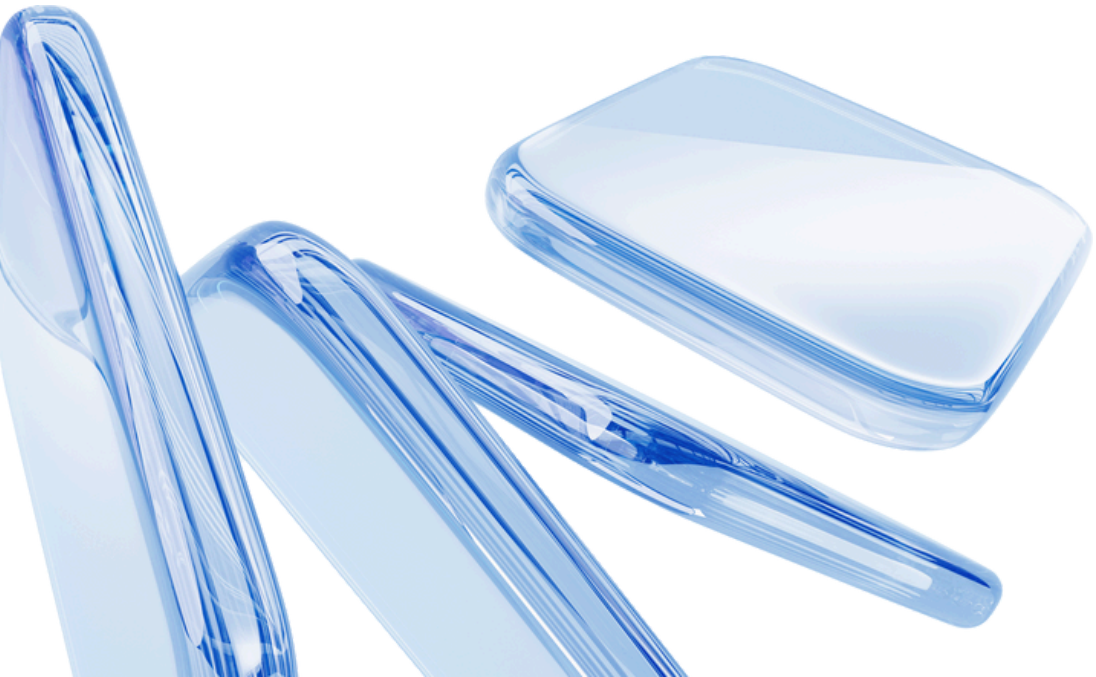
This whitepaper examines how **AI improves digital experience, resilience, and efficiency** in IT operations.

In the first chapter,

we look at the function and impact of AI in IT operations, including its advantages and practical uses.

In the second chapter,

In the second chapter, we describe how BGTS combines AI and engineering expertise through Praxila to modernise IT operations with modular capabilities, shared data foundations, and measurable service improvements.



Chapter 1:
The Growing Role of AI in IT Operations

1.1 Introduction

Analytics, automation, and AI are changing how IT teams work, as these practical tools help companies detect and solve issues early, keep services up and running smoothly, and reduce manual effort. On the other hand, IT decision-makers face a tough challenge. Because in order to achieve success, enterprises should adopt and use these technologies efficiently to perform better without compromising cost-effectiveness, security, and compliance.

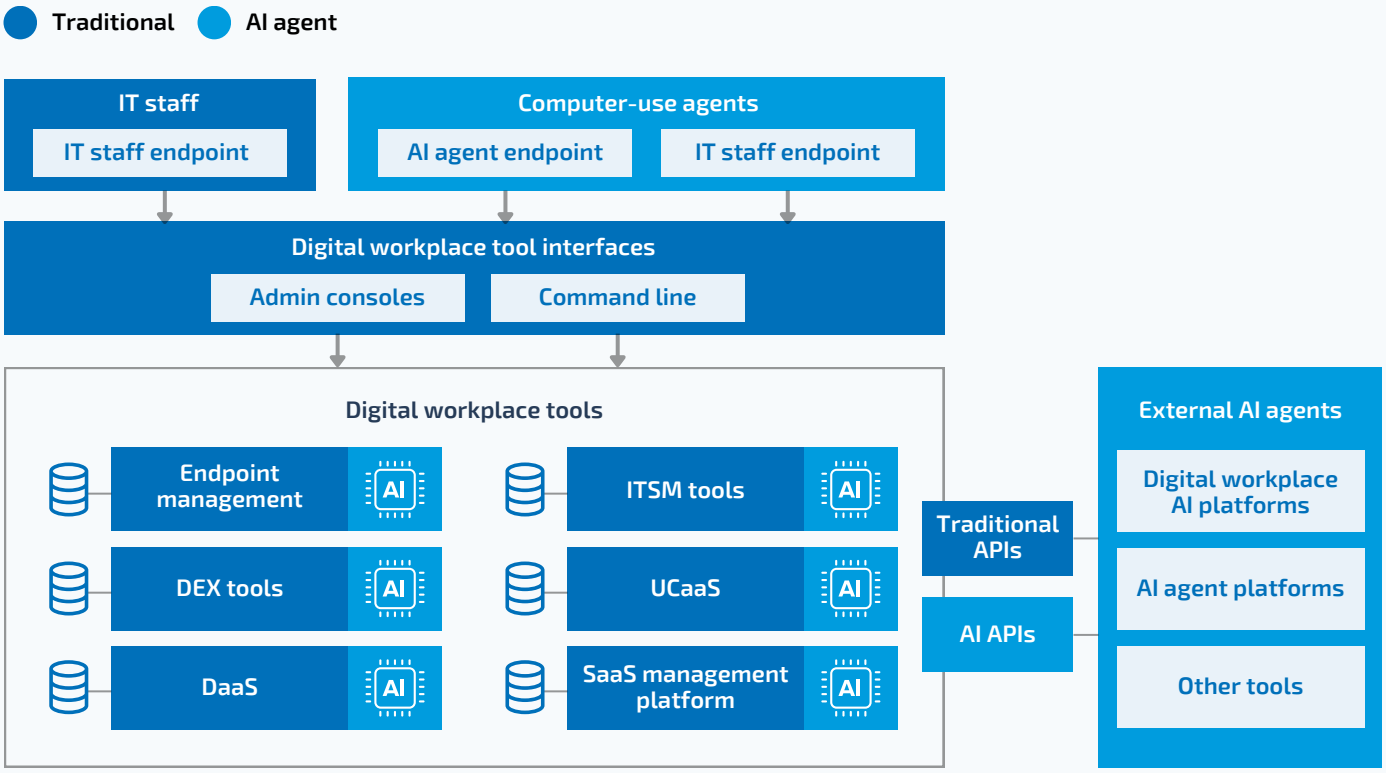
> **Analytics, AI, Automation**
>
> In order to achieve success, enterprises should adopt and use these technologies efficiently.

1.2 How AI Shapes Modern ITOps

AI has become a cornerstone of modern IT management. It streamlines repetitive tasks, detects anomalies in real time, and supports data-driven decision-making across infrastructure, applications, and user environments.

Technologies such as machine learning, natural-language processing, and predictive automation help teams move from reactive troubleshooting to proactive, intelligent orchestration. In practice, AI-driven systems can identify potential failures, apply corrective actions automatically, and confirm results, keeping services stable and users productive.

Locations of AI Agents in Digital Workplace IT Operations[1]



AI = artificial intelligence; API = application programming interface; DaaS = desktop as a service; DEX = digital employee experience; IT = information technology; ITSM = IT service management; SaaS = software as a service; UCaaS = unified communications as a service

Source: Gartner

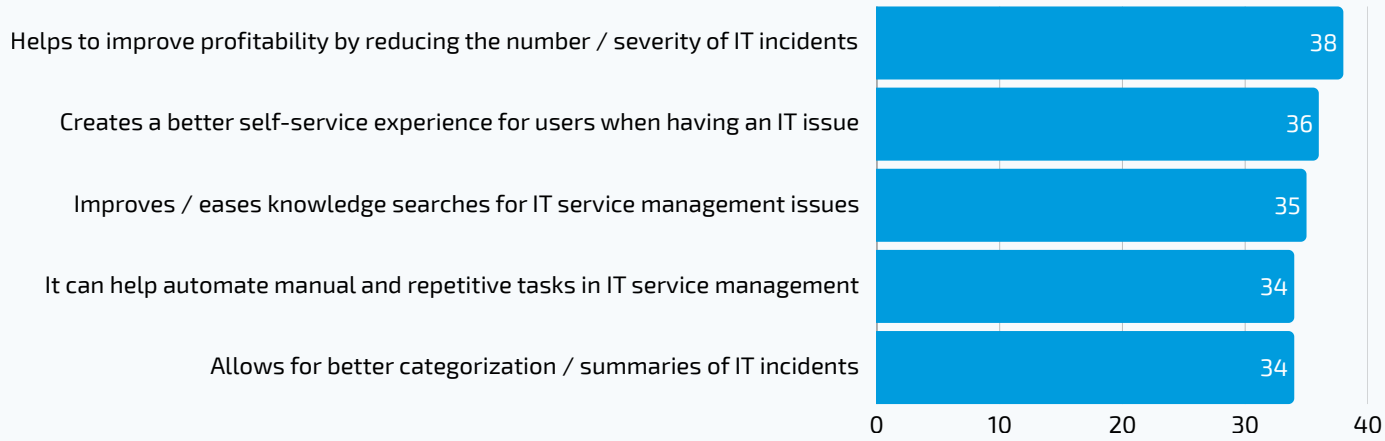
1.3 Key Benefits and Impact Areas

AI integration delivers measurable improvements across IT operations:

- **Operational Efficiency:** Automation of routine tasks shortens response times and reduces manual workload.
- **Cost Optimisation:** Predictive insights support smarter resource allocation and capacity planning.
- **Proactive Maintenance:** AI helps detect problems early and fix them automatically, reducing downtime.
- **Enhanced Digital Experience:** Intelligent support tools improve user satisfaction and technology adoption.
- **Resilience and Scalability:** AI maintains consistent performance even as infrastructure and data volumes expand.

The advantages of AI integration shift IT operations from reactive management to predictive, autonomous, and data-centric performance.

Benefits of using Generative AI in IT service management [2]



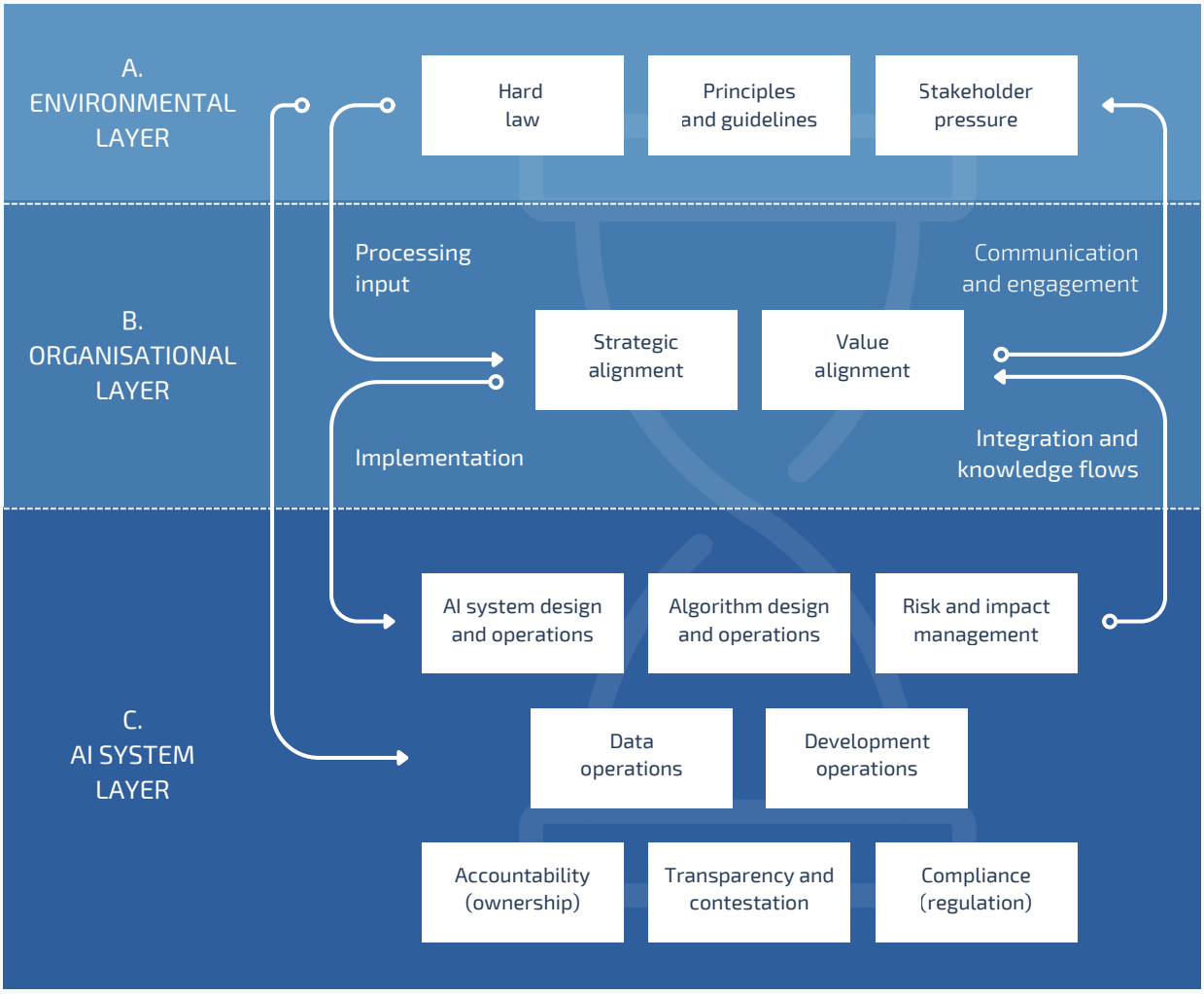
Source: Gartner

1.4 Governance and Risk Management

Of course, introducing AI isn't just about technology. It's also about responsibility. Therefore, as AI becomes central to IT operations, strong governance is essential. Organisations need clear policies for the AI lifecycle, covering design, deployment, monitoring, and retirement, while ensuring accountability and transparency.

Cross-functional governance boards that include IT, security, and data leaders help keep every AI initiative aligned with business goals and regulatory frameworks. Proper oversight mitigates risks such as bias, misconfiguration, or data exposure while maintaining confidence in AI-enabled decision-making.

The Hourglass Model of Organisational AI Governance [3]



Source: *AIGA*

1.5 Skills and Organisational Readiness

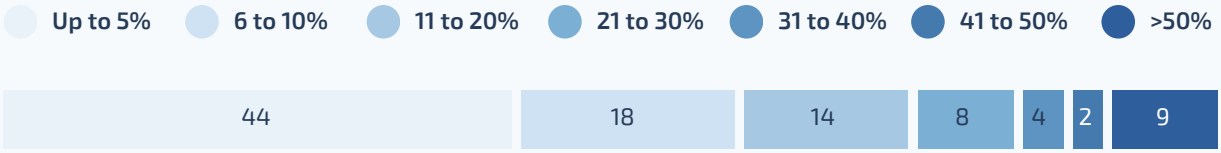
Successful AI adoption requires both technical advancement and cultural change. Engineers and analysts must expand their skills to include automation frameworks, data analytics, and AI model governance.

Equally important is nurturing a culture of continuous learning and experimentation. When teams are encouraged to explore AI tools safely and work alongside intelligent systems, they build trust in automation and accelerate transformation. This approach turns IT professionals into innovation partners rather than reactive support providers.

AI Reskilling [4]

Organisations have begun reskilling employees due to AI use, and respondents expect increased reskilling in the next three years.

Share of employees reskilled in the past year due to AI use,[1] % of respondents



Share of employees expected to be reskilled over the next 3 years due to AI use,[2] % of respondents

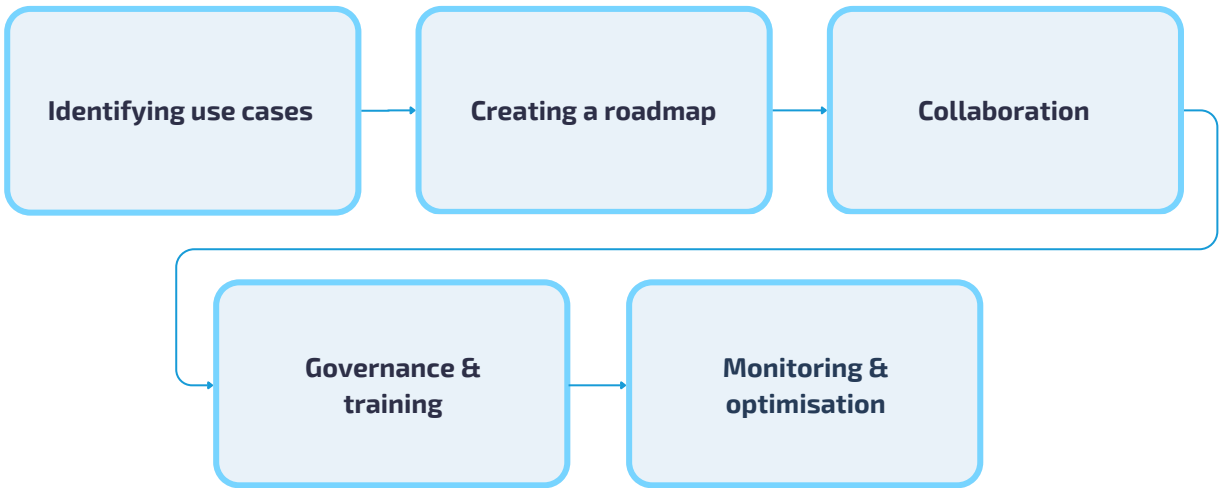
[1] Only asked of respondents whose organisations use AI in at least 1 function. Figures were calculated after removing respondents who said "don't know." The question asked, "What share of employees in your organization's workforce have been reskilled in the past year as a result of AI adoption?"

[2] Only asked of respondents whose organisations use AI in at least 1 function. Figures were calculated after removing respondents who said "don't know." The questions asked, "What share of employees in your organisation's workforce do you expect will be reskilled over the next 3 years as a result of AI adoption?"

Source: McKinsey

1.6 AI Implementation Process in IT Operations

AI Implementation Steps



To successfully adopt AI in IT operations, organisations should:

- **Identify Target Use Cases:** Focus on repetitive, high-volume activities such as monitoring, patching, and incident triage.
- **Create an AI Integration Roadmap:** Set clear milestones and KPIs for maturity and return on investment.
- **Collaborate with Technology Partners:** Work closely with vendors to ensure interoperability and transparency.
- **Build Governance and Training Programs:** Foster trust and accountability while developing internal expertise.
- **Monitor and Optimise Continuously:** Use analytics to refine AI models and operational performance.

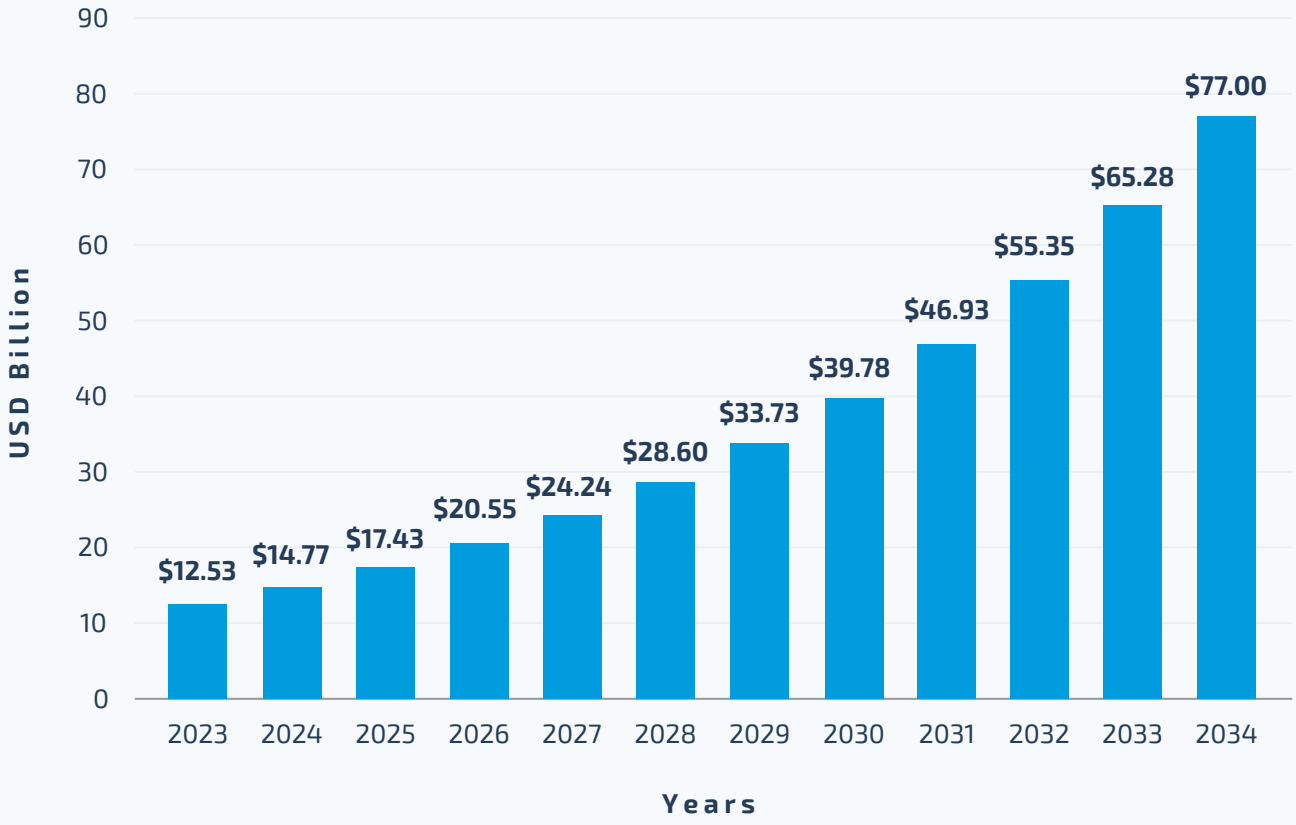
Each stage helps make sure AI delivers real value without losing control of quality or compliance.

1.7 The Future of AIOps

The future of IT operations lies in AIOps, where artificial intelligence technologies work together to manage complexity at scale. Predictive, autonomous systems will continuously balance performance, cost, and user experience, allowing IT teams to focus on innovation.

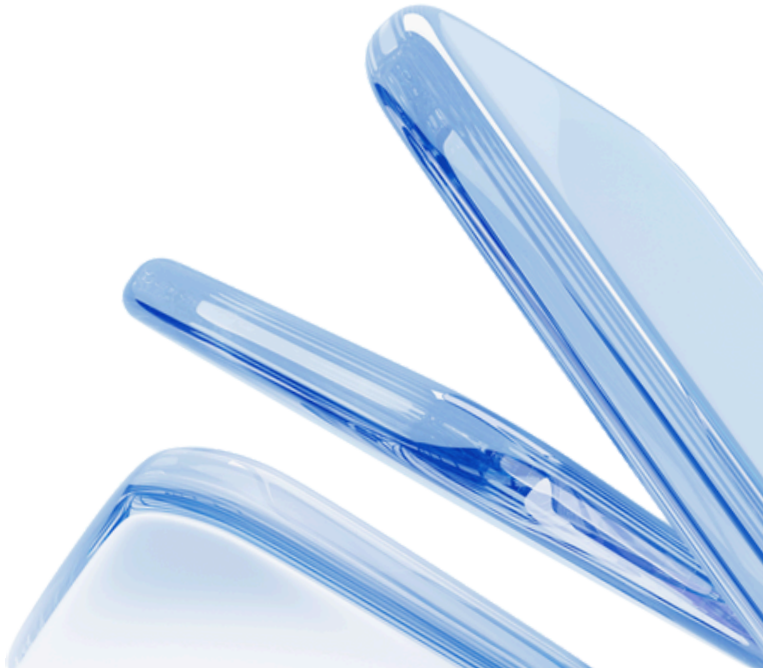
Organisations that adopt **AIOps** early will gain lasting advantages in **efficiency, resilience, and digital maturity**, thus setting new standards for intelligent service delivery.

Artificial Intelligence for IT Operations Platform Market Size 2023 to 2034 [5]



Source: Precedence Research

With a clear understanding of how AI is transforming IT operations, the next chapter explores how **BGTS** applies these capabilities in real-world environments, using AI to optimise service delivery, infrastructure monitoring, and digital workplace performance.



Chapter 2:
How BGTS Leverages AI in IT Operations

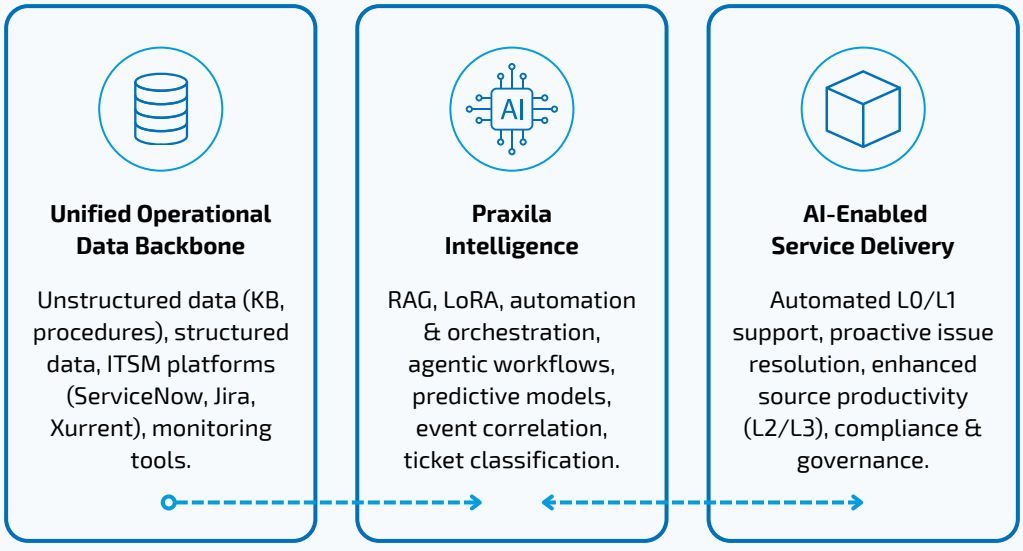
2.1 Overview

BGTS delivers large-scale **IT operations services** for enterprises across **finance, telecommunications, and holding companies**, managing environments that include more than **500,000 endpoints**, over **250 technology domains** and high volumes of daily service requests. While these environments exhibit strong operational discipline, they are often shaped by fragmented data sources, diverse monitoring tools and differing levels of process maturity.

To address these complexities, BGTS applies an integrated operating model underpinned by a **unified operational data backbone** that standardises inputs and strengthens decision-making. AI capabilities within this model are delivered through **Praxila**, BGTS' **AI-driven IT operations centre**, enabling consistent service delivery across heterogeneous environments. By combining automation, governance, and expertise, BGTS helps organisations maintain reliable, scalable, and transparent IT operations.

The **AI-Driven ITOps Framework** below illustrates the core pillars of this operating model.

AI-Driven ITOps Framework

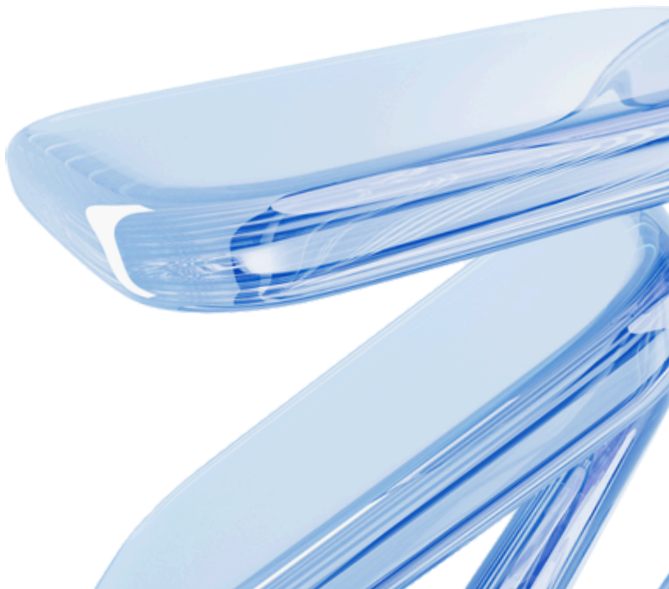


2.2 The Challenge

In high-volume enterprise environments, IT operations face recurring challenges that limit both efficiency and predictability. These challenges often stem from fragmented systems, inconsistent operational data, and the limitations of manual processes in complex infrastructures.

Key Challenges

- **Fragmented operational systems** across ITSM platforms, monitoring tools, communication channels, and enterprise applications, which reduces end-to-end visibility.
- **Inconsistent record quality**, including misclassification, missing fields, and uneven descriptive standards, which weakens reporting and automation.
- **High alert noise** produced by multiple monitoring sources, making it difficult to separate genuine incidents from routine fluctuations.
- **Dependence on individual expertise** due to limited institutional knowledge, leading to variable service outcomes and longer onboarding cycles.
- **Differences in service catalogues, SLA models, and category hierarchies** across environments, which complicates governance and standardisation.
- **Manual execution of repetitive operational tasks,** consuming analyst time and reducing space for proactive work.
- **Limited capability measurement,** making it hard to benchmark performance or identify maturity gaps.



2.3 The AI-Enabled Transformation

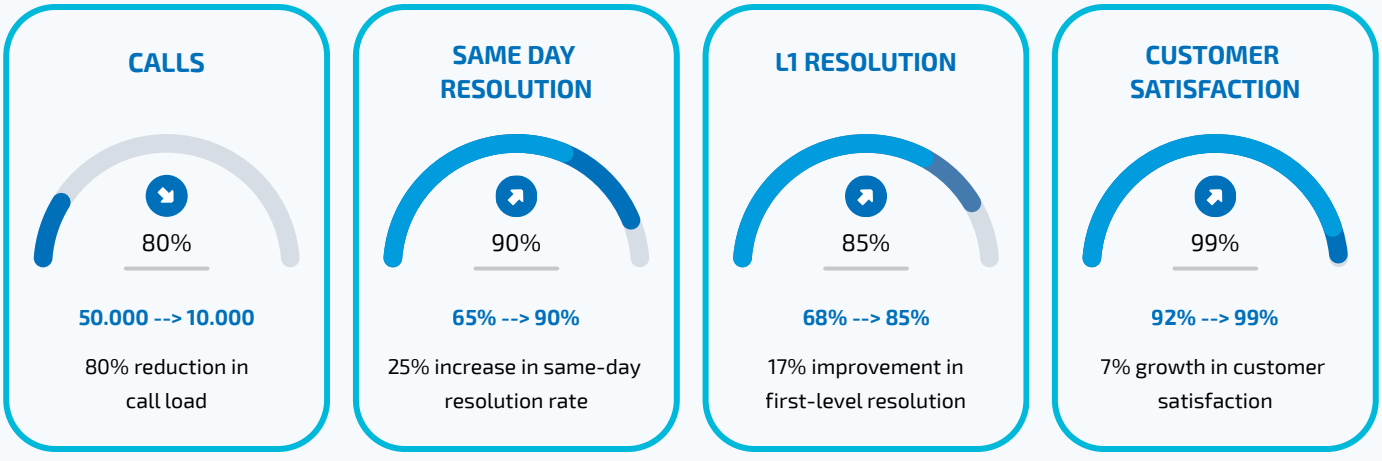
BGTS enhances IT operations through a comprehensive **AI-enabled transformation** that strengthens each stage of the operational lifecycle. AI capabilities are embedded across **service management, data centre operations and user support processes**, improving efficiency and consistency while keeping human oversight where it matters.

AI supports **interaction channels** such as phone, Microsoft Teams, and WhatsApp by capturing intent, structuring information, and enabling fast routing with effective escalation when needed. **Ticket quality** is improved at the point of entry through automated classification and enrichment. **Monitoring signals** are refined through alert optimisation, correlation, and anomaly detection, reducing noise and accelerating triage. **Knowledge** is reinforced through continuous creation and improvement of reusable resolution guidance. **Process and governance** analytics support improvements to SLAs, catalogues, and operational standards.

Praxila delivers these capabilities as modules that can be deployed based on client maturity. This approach allows BGTS to prioritise **high-volume operational pain points** first, then expand toward deeper **optimisation** and continuous **improvement** as operational data grows.

The resulting improvements translate into measurable gains across core operational performance indicators, as shown below.

How AI Transformed BGTS' IT Operations Services [6]



2.4 The New Operating Model

BGTS delivers IT operations through a **structured, multi-layer operating model** that aligns people, processes, technology, and AI into a single delivery model. The foundation of this model is a **unified operational data backbone** that standardises key operational inputs, including tickets, alerts, interactions, and operational knowledge. This creates a consistent basis for automation, analytics, and operational intelligence, reducing fragmentation and improving end-to-end visibility across client environments.

Praxila, BGTS' AI-driven IT operations centre, sits on top of this backbone and provides the **intelligence layer** that turns operational data into action. It supports faster triage and better decision-making by correlating signals across systems, improving record quality, and enabling consistent routing and escalation. This allows BGTS to deliver **improved service outcomes** across complex enterprise estates, even when tools, processes, and maturity levels differ.

AI capabilities enhance each operational tier:

L0 virtual assistants handle common enquiries, capture structured input, and initiate standard actions through approved workflows.

L1 support teams work with cleaner, better-classified records, guided knowledge suggestions, and faster routing decisions.

L2 analysts and consultants receive correlated, noise-reduced monitoring signals and contextual insights that support faster diagnosis.

L3 senior experts gain deeper visibility into systemic issues through trends, maturity views, and continuously refined organisational knowledge.

This model is not based on reducing team size. Instead, it changes how work is distributed and where expertise is applied. As routine L1 activities become increasingly automated, capacity shifts toward L2 and L3 responsibilities, increasing **technical depth**, expanding **technology coverage**, and improving **service quality**. The result is a delivery model that scales more effectively and supports stronger governance, reporting, and continuous improvement.

The table below showcases how the introduction of AI has shifted IT operations from manually executed, multi-level workflows to an **AI-first structure** that prioritises accuracy, consistency, and operational efficiency across core use cases.

Use Case	Before AI	After AI
Call prioritisation and categorisation	Semi-manual evaluation and routing of tickets	Fully automated through AI-driven categorisation and prioritisation workflows
Error detection in support processes	Dependent on human analysis through reports and dashboards	80% of errors automatically detected and flagged by AI
Unexpected behaviour detection	Based on manually collected and analysed metrics	Self-learning AI models identify anomalies in real time
Change and capacity management	Dependent on manual Change Management success	Automated capacity adjustments driven by analytical insights
L0 call handling (NLP-based)	Managed directly by call centre staff	AI-driven conversational layer positioned before the call centre
Alert filtering and optimisation	Manually refined to eliminate false positives	Fully automated event filtering and correlation
Detection of distributed or multiple events	Limited to basic security-level monitoring	Applied across all operational layers with cross-system visibility
Detection of repeated events on the same IT component	Managed reactively through Problem Management processes	Automated correlation and resolution workflows
Incident resolution	Multi-level manual resolution through support tiers	AI resolves a significant portion of incidents at the first level

This reorganisation positions BGTS' operations teams as **value-added digital enablers**, allowing them to focus on consultancy, continuous improvement, and service innovation.

2.5 Praxila

Praxila is BGTS' AI-driven IT operations centre, designed to transform operational architectures end-to-end with **artificial intelligence** through interconnected modules that reinforce one another. The objective is to consolidate **operational data** that is typically distributed across different systems, such as tickets, alerts, procedures, service catalogues, and workforce performance indicators, into a **unified backbone**, enabling AI to learn patterns, interpret context, and optimise workflows over time.

Praxila introduces modules spanning the **full operational lifecycle**, from ticket intake and alert management to knowledge creation, competency measurement, and analytical reporting. Because all modules operate on a unified data backbone organised around a **central ticket repository**, improvements in one area strengthen the others, enabling the system to adapt, improve accuracy, and increase process maturity over time. The resulting architecture strengthens organisational memory, improves auditability, reduces dependency on individuals, and supports uninterrupted operations for critical services. Overall, it provides a **strategic foundation for operational excellence** and future AI-enabled IT services.

Praxila Module Catalogue

Module 1: AI-Assisted Contact Centre

Enables faster, more consistent request intake across voice and digital channels, with structured context and clean handover when needed.

- Conversational intake via phone, Teams, and WhatsApp
- Real-time transcription, summarisation, and context capture
- Ticket creation plus escalation with full interaction history

Module 2: AI-Enhanced Record Processing

Improves record accuracy and consistency at creation so routing, reporting, and automation work reliably.

- Category, priority, urgency, and assignment recommendations
- Field completion, language normalisation, and quality checks
- Better structured records for analytics and downstream automation

Module 3: AI-Driven Knowledge Base

Turns operational resolutions into reusable knowledge and makes guidance available during service delivery.

- Article and runbook creation from resolved tickets
- Knowledge suggestions surfaced during ticket handling
- Continuous refinement through quality scoring and updates

Module 4: AI-Based Alarm Optimisation and Correlation

Reduces alert noise and correlates signals so teams can triage faster and act on clearer incident candidates.

- Deduplication and suppression of non-actionable alerts
- Correlation across components, services, and locations
- Anomaly detection and pattern-based incident grouping

Module 5: AI Orientation and Governance Bot

Improves consistency by guiding teams through standards, procedures, and governance expectations.

- Q&A support for operational and governance topics
- Role-based onboarding and process guidance
- Standard-aligned prompts and decision support

Module 6: AI-Driven Competency Analytics

Measures capability and maturity using real operational data to support workforce development and service quality.

- Competency insights based on ticket behaviour and outcomes
- Trends for teams and roles across time and use cases
- Skill gap signals and development recommendations

Module 7: AI-Led ITSM Improvement

Supports continuous improvement by analysing ITSM structures and recommending targeted optimisation.

- Service catalogue and taxonomy alignment recommendations
- SLA and process evaluation using operational performance signals
- Prioritised improvement opportunities and improvement backlog inputs

2.6 The Technology Stack

BGTS' technology stack unifies **enterprise platforms, monitoring tools, automation engines, and AI-driven modules** to support large-scale, data-centric IT operations. Built to enable **Praxila**, each stack layer supports specific module groups. This alignment ensures modules can be deployed independently when needed, while still benefiting from **common data, governance controls, and consistent operational standards**.

AI Process & Governance Layer

- SLA model evaluation and optimisation
- Service catalogue structuring and category hierarchy alignment
- ITSM process maturity assessment and improvement recommendations

AI Knowledge & Capability Layer

- Automated generation and scoring of knowledge base content
- Contextual retrieval powered by vector search and RAG
- Competency analytics measuring skill, maturity and operational contribution

AI Operational Intelligence Layer

- Automated ticket classification and enrichment
- CI recognition and data normalisation
- Alert correlation, clustering and anomaly detection

AI Experience Layer

- Conversational AI supporting voice and digital channels
- Natural language understanding, real-time transcription and contextual reasoning
- Seamless escalation with full operational context

Core Platforms & Integrations

ITSM platforms

- servicenow
- Jira Service Management
- xurrent

Monitoring tools

- dynatrace
- elastic
- splunk>
- ZABBIX
- LogicMonitor
- moogsoft
- PagerDuty

Communication channels

- WhatsApp
- Microsoft Teams
- telephony systems

Enterprise platforms

- SAP
- salesforce
- Microsoft Dynamics 365

Integration framework

- API's
- Webhooks
- Event based synchronisation

2.7 The AI-Driven Differentiation

Praxila extends the value of conventional ITSM and AIOps approaches by combining advanced language models, automation engines, and cross-domain operational intelligence. It integrates learning, reasoning, and operational execution within a **unified architecture**, helping organisations improve reliability, speed, and transparency across IT operations with appropriate **governance and human oversight**.

Key Factors

- **Autonomous AI-Driven Contact Handling**
  Conversational AI handles phone, Teams, and WhatsApp interactions in real time, triggers actions, and escalates to humans with full context.

- **Organisation-Specific Learning Models (LoRA + RAG)**
  Client-specific models learn continuously from documentation, ticket history, transcripts, and knowledge articles to deliver environment-aware outcomes.

- **Multi-Layer AI Integration Across Operational Processes**
  AI is applied across ticket creation, alert processing, knowledge evolution, process analytics, and capability assessment as a single integrated approach.

- **Context-Aware Alert Intelligence**
  AI reduces noise, identifies correlations, clusters incidents, and highlights probable root causes beyond traditional rule-based monitoring.

Real-Time Ticket Quality Enhancement
Ticket attributes such as priority, category, description quality, and CI alignment are corrected at creation to improve downstream automation and reporting.

Self-Evolving Knowledge Base
The system generates and updates knowledge articles from historical resolutions, scores content quality, and protects operational know-how from being lost.

Agentic AI for Autonomous Operational Execution
Agent-based reasoning performs multi-step operational tasks across enterprise platforms and adapts decisions dynamically based on context.

Data-Driven Competency and Capability Assessment
Objective capability insights are derived from ticket behaviour and performance patterns to measure maturity and development needs.

AI-Led ITSM Process Optimisation
SLA models, category hierarchies, service catalogues, and process flows are analysed to recommend targeted improvements and strengthen standardisation.

Self-Improving Operational Intelligence
A shared operational knowledge base enables continuous improvement in classification, correlation, recommendations, and decision quality over time.

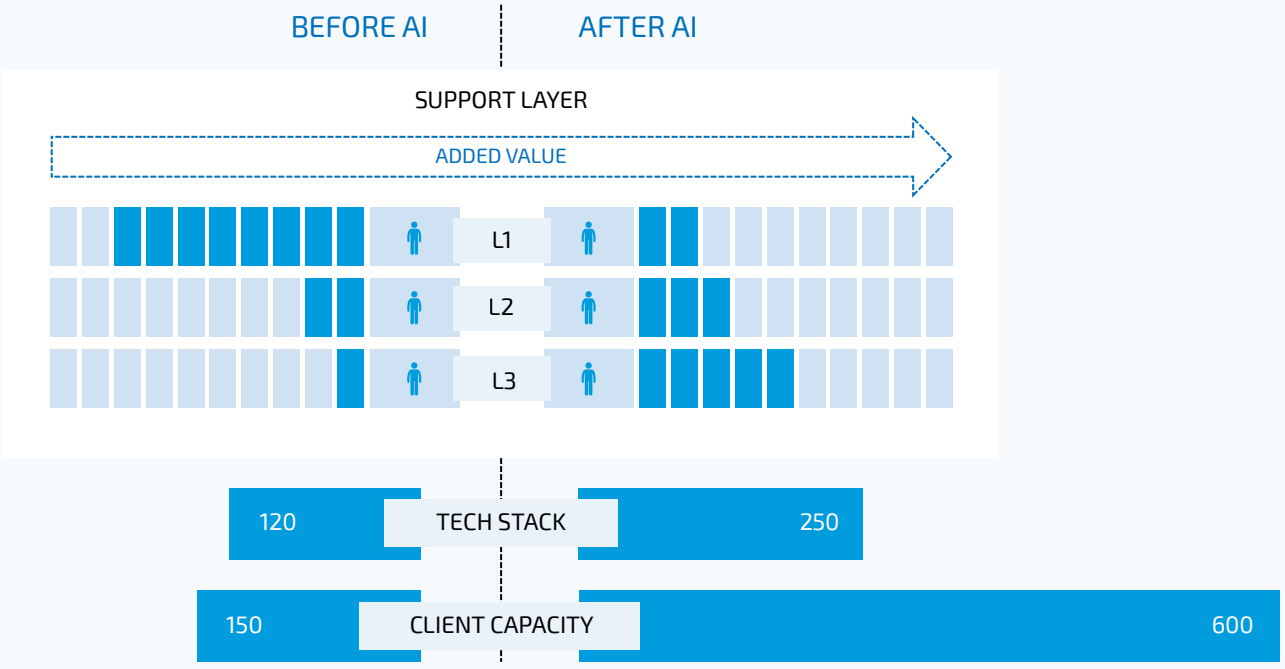
2.8 Conclusion

BGTS has built an **AI-driven IT operations delivery model** that helps enterprise clients run more reliable, transparent, and scalable services. The approach starts with a **unified operational data backbone** that standardises inputs from tickets, alerts, procedures, catalogues, and performance data, then applies **AI across the full operational lifecycle**. This foundation supports consistent execution across heterogeneous environments, while also enabling continuous optimisation through monitoring intelligence and analytical reporting.

A key part of this model is **Praxila**, BGTS' AI-driven IT operations centre, which packages AI capabilities into deployable modules spanning the full operational lifecycle. Because these modules share a common backbone, improvements compound over time, raising accuracy, consistency, and speed across service delivery. As routine Level 1 activities are increasingly automated, BGTS has expanded its Level 2 and Level 3 capacity, deepened its technical coverage, and improved service quality without relying on a larger delivery footprint.

The result is a service model that scales effectively for enterprise demand. BGTS has increased its managed service capacity by approximately **300 percent** while maintaining high operational standards. Clients benefit from faster response and resolution, reduced operational noise, stronger resilience across critical services, and better visibility through continuous monitoring and actionable reporting. Overall, BGTS provides a **practical path to AI-enabled IT operations** that delivers measurable outcomes today and builds a strong foundation for future AI-driven IT services.

Value-Added Organisation [7]



About BGTS

BGTS is an international **software and technology services** company, powered by **over 1,800 professionals**. With **30 years of experience** in digital transformation & engineering, technology consulting, and enterprise service management, we empower our clients to achieve success through a combination of **engineering expertise and industry insight**.

Our strategically located engineering centres and group companies in **London, Sheffield, Amsterdam, Düsseldorf,** and other key locations provide flexibility, speed, and convenience, enabling us to deliver **tailored, impactful services** to clients around the world.

BGTS is committed to creating value for enterprises by offering **high-quality, customer-centric, and results-driven** services. The company has received multiple international awards and is recognised as one of the largest independent software companies in its region.

Contact BGTS to design and implement your AI-powered IT Operations roadmap and turn automation into measurable business value.

Endnotes

1. Gartner Research (2025), The Impact of AI Agents on Digital Workplace IT Operations – *Locations of AI Agents in Digital Workplace IT Operations* https://www.gartner.com/en/documents/6957666

2. ScienceLogic & Vanson Bourne (2025), The Future of AI in IT Operations: Benefits and Challenges – *Benefits of Using Generative AI in IT Service Management* https://sciencelogic.com/thank_you/the-future-of-ai-in-it-operations

3. University of Turku (2025), AI Governance Framework – *The Hourglass Model of Organizational AI Governance* https://ai-governance.eu/ai-governance-framework/the-hourglass-model/

4. McKinsey & Company (2025), The state of AI – *Exhibit 6* https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai

5. Precedence Research (2025), Artificial Intelligence for IT Operations Platform Market Size 2024 to 2034 – https://www.precedenceresearch.com/artificial-intelligence-for-it-operations-platform-market

6. BGTS (2025), internal data – *How AI Transformed BGTS' IT Operations Services*

7. BGTS (2025), internal data – *Value Added Organisation*

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